

CLAIMS

1. A DNA comprising a promoter region having the nucleotide sequence presented by SEQ ID NO:1 which comprises a regulatory sequence of a human adiponectin gene.

2. The DNA according to claim 1, which consists of a promoter region having the nucleotide sequence presented by SEQ ID NO:1 which comprises a regulatory sequence of a human adiponectin gene.

3. The DNA according to claim 2, wherein the regulatory sequence is a sequence containing PPRE (Peroxisome Proliferator-activated Receptor Responsive Element).

4. The DNA according to claim 2, wherein the regulatory sequence is a sequence containing LRH-RE (Liver Receptor Homologue-1 Responsive Element).

5. The DNA according to claim 2, wherein the regulatory sequence is the nucleotide sequence presented by SEQ ID NO:2.

6. The DNA according to claim 2, wherein the regulatory sequence is the nucleotide sequence presented by SEQ ID NO:3.

7. The DNA according to claim 2, wherein the regulatory sequence is a nucleotide sequence comprising the nucleotide sequence presented by SEQ ID NO:2 and the nucleotide sequence presented by SEQ ID NO:3.

8. The DNA according to claim 2, which the regulatory sequence is the nucleotide sequence presented by SEQ ID NO:4.

9. A recombinant plasmid DNA comprising the DNA according to claim 2.

10. The recombinant plasmid DNA according to claim 9, which is capable of expressing a structural gene under control of the promoter region comprising the regulatory sequence of human adiponectin gene can express.

11. A transformant transformed with the recombinant plasmid DNA according to claim 9 or 10.

12. A screening method of a compound which is capable of enhancing human adiponectin promoter activity or a salt thereof, which comprising using the transformant according to claim 11.

13. A screening method of a preventive and/or therapeutic medicine for syndromes selected from: syndrome X, metabolic syndrome, multiple risk factor syndrome, insulin resistance syndrome, deadly quartet, and visceral fat syndrome, which comprises using the transformant according to claim 11.

14. The screening method according to claim 13, which a disorder as a etiology of the syndrome is diabetes, obesity, hypercholesterolemia, hyperlipoproteinemias, hyperlipidemia, arteriosclerosis, hypertonics, circulatory system disease, or polyphagies.

15. A screening kit of a compound which is capable of enhancing human adiponectin promoter activity or a salt thereof, which comprises using the transformant according to claim 11.

16. A screening kit of a preventive and/or therapeutic medicine for syndrome selected from syndrome X, metabolic syndrome, multiple risk factor syndrome, insulin resistance syndrome, deadly quartet, and visceral fat syndrome, which comprises using the transformant according to claim 11.

17. A compound which is capable of enhancing human adiponectin promoter activity or a salt thereof, which is obtainable by using the screening method according to claim 12.

18. A preventive and/or therapeutic medicine for syndrome selected from syndrome X, metabolic syndrome, multiple risk factor syndrome, insulin resistance syndrome, deadly quartet, and visceral fat syndrome, which is obtainable by using the screening method according to claim 13.

19. A compound which is capable of enhancing human adiponectin promoter activity or a salt thereof, which is obtainable by using the screening kit according to claim 15.

20. A preventive and/or therapeutic medicine for syndromes selected from syndrome X, metabolic syndrome, multiple risk factor syndrome, insulin resistance syndrome, deadly quartet, and visceral fat syndrome, which is obtainable by using the screening kit according to claim 16.

21. A pharmaceutical composition which comprises the compound which is capable of enhancing human adiponectin promoter activity according to claim 17 or 19 or a salt thereof.

22. A pharmaceutical composition which comprises the preventive and/or therapeutic medicine for syndromes selected from Syndrome X, metabolic syndrome, multiple risk factor syndrome, insulin resistance syndrome, deadly quartet, and visceral fat syndrome according to claim 18 or 20.